# **RCRA Compliance Evaluation Inspection Report**

## 1) <u>Inspectors and Authors of Report</u>

Christopher Krejci – Environmental Engineer, Eastern Research Group, Inc. Otis S. Kerns – Environmental Engineer, U.S. EPA Region 2 RCRA Compliance Branch

### 2) Facility Information

ExxonMobil Paulsboro Lube Plant 1001 Billingsport Road Paulsboro, New Jersey 08066 EPA ID No.: NJD986629178

# 3) Responsible Official(s)

Hank Muller - Plant Manager, ExxonMobil Lubricants and Specialties

## 4) <u>Inspection Participants</u>

Hank Muller – Plant Manager, ExxonMobil Lubricants and Specialties
Frank Radio – SSHE Systems Coordinator, ExxonMobil Lubricants and Specialties
Jose D. Caamano – Operations Supervisor, ExxonMobil Refining and Supply Company
Tom Femano – Chemist, ExxonMobil Lubricants and Specialties
Kim Machovic – Corporate Environmental Advisor, ExxonMobil Refining and Supply
Company (joined closing conference by phone)
Otis S. Kerns – Environmental Engineer, U.S. EPA Region 2 RCRA Compliance Branch
Christopher Krejci – Environmental Engineer, Eastern Research Group, Inc.

### 5) Date(s) and Time(s) of Inspection

Approximately 1 p.m. to 4:30 p.m. July 14, 2016

### 6) Applicable Regulations

40 Code of Federal Regulations (CFR) Parts 260-279, Resource Conservation and Recovery Act (RCRA) Sections 3002, 3005 and 3007 (42 US Code - Annotated U.S.C.A. 6925 and 6927)

## 7) <u>Purpose of Inspection</u>

The objective for the visit described in this report was to conduct an unannounced compliance evaluation inspection (CEI) to assess ExxonMobil's compliance with applicable RCRA requirements. The scope of the inspection covered all applicable RCRA generator regulations.

## 8) Facility Description

ExxonMobil owns and operates a 38-acre lubricants manufacturing facility across the street from PBF Energy's refinery in the Paulsboro section of Greenwich Township, Gloucester County, New Jersey. The facility has been in operation since 1991. It currently has approximately 150 employees, and manufactures lubricants for automotive, marine, aviation, and other applications. The facility is a small quantity generator and operates from 11 p.m. on Sunday to 11 p.m. on Friday each week.

# 9) <u>Facility Inspection History</u>

Table 1 summarizes EPA's RCRA inspection records for this facility.

Table 1. RCRA Inspection History for the ExxonMobil Paulsboro Lubricants Plant

Date	Agency	Type of Inspection	Violations Found?
3/18/2009	NJDEP	CEI	No
3/5/2009	NJDEP	CEI	No
12/13/2004	NJDEP	CEI	No
10/28/1999	NJDEP	CDI	No

CDI: Case development inspection.

CEI: Compliance evaluation inspection.

# 10) Summary of Current Inspection

The inspection team discussed the various processes present at the facility and toured the facility process and waste accumulation areas.

ExxonMobil receives lubricant feedstock oils through pipelines from the PBF Energy refinery across the street. ExxonMobil also purchases drums, kegs, and packages of lubricant feedstocks and other materials (e.g., polymers) from other suppliers. Incoming products arrive at the facility by truck, rail, or mail. The lubricant feedstock oil is processed at the facility via inline blending or blending in kettles. Feedstocks are heated using inline heaters, bayonet heaters, and kettles to promote blending, but no molecular cracking or other significant chemical reactions occur onsite. ExxonMobil also purchases steam from PBF Energy, which is used for their process heaters.

The facility uses a mixing tank to blend polymers in bead or block form into the lubricant oils to increase their viscosity. Facility personnel noted that their production processes and equipment cleaning activities do not routinely generate any wastes. Any oil that is removed from a process unit or pipeline, or any product that is off-spec, is typically reprocessed into chainsaw bar and chain oil.

ExxonMobil has a tank farm with approximately 160 tanks, which are used to store feedstocks, products, and water for fire protection. Facility staff noted that tanks are cleaned out periodically, and tank bottoms are always disposed of as nonhazardous waste.

The floor drains beneath the truck loading rack drain to Tank 106, which is an accumulation tank for slop oil. Oil from Tank 106 is processed into bar and chain oil for chainsaws. Other floor and sewer drains within the process areas of the facility drain to an oily water sump (see Photo 1) that discharges into PBF Energy's oily water sewer across the street. Liquids in this sewer are ultimately treated before being discharged to the Delaware River.



Photo 1. Sump and Pumps That Send Oily Water to PBF Energy's Wastewater Treatment Plant

ExxonMobil packages its products in containers of varying sizes from 1-quart oil containers up to 55-gallon metal drums. In addition to shipping packaged products out on trucks, ExxonMobil also ships out products in bulk via tank trucks.

During the walkthrough, the inspection team noted a parts washer in the hose room that contained solvent with a nominal flash point of 150 degrees Fahrenheit. Facility personnel noted that a waste management company maintains and cleans the parts washer for the facility.

The inspection team visited the analytical laboratory on-site. Mr. Tom Femano, a laboratory chemist, explained that the laboratory runs analysis for total acid and total base number, in addition to some lubricant performance parameters (e.g., viscosity). He explained that the chemicals used in the lab are heptane, chlorobenzene, acetone, toluene, and acetic acid, most of which ultimately end up in the waste solvent tank through a dedicated laboratory sink. He also pointed out a dedicated laboratory sink that is plumbed to the facility's slop oil tank for recycling.

The inspection team also visited the main waste collection areas at the facility, including the following:

- A universal waste storage area for batteries and universal waste lamps (see Photo 2);
- Satellite accumulation areas for aerosol cans (see Photo 3) and oily rags;
- A less-than-180-day area for the storage of hazardous wastes outside, including a 500-gallon waste solvent tank known as Tank 505 (see Photos 4 through 6);
- A less-than-180-day area for the storage of hazardous wastes in the laboratory sample cage (see Photo 7); and
- A nonhazardous waste storage area (see Photo 8).



Photo 2. Universal Waste Lamps Sitting on Table in Universal Waste Area



Photo 3. Satellite Accumulation Area for Aerosol Cans



Photo 4. 500-Gallon Waste Solvent Storage Tank



Photo 5. Label on 500-Gallon Waste Solvent Tank



Photo 6. Less-Than-180-Day Waste and Flammable Products Area



Photo 7. Less-Than-180-Day Waste Area Near Lab (Black Drum Was Unlabeled and Contained Hazardous Waste Rags)



Photo 8. Nonhazardous Waste Storage Area

Facility personnel noted that the spent solvent tank typically contains approximately 85 percent heptane and a small amount of chlorobenzene. These solvents originate in the laboratory during their glass cleaning and sample analysis activities. The tank is inspected daily, has a pressure vacuum vent that controls its emissions, and is emptied at least every 180 days.

ExxonMobil primarily contracts with Veolia for waste disposal.

During the visit to the universal waste area, the inspection team observed three used fluorescent lamps and one high intensity discharge bulb sitting out on a table.

During the visit to the laboratory sample cage, the inspection team observed a partially full hazardous waste drum with no label.

The inspection team discussed employee training activities relevant to RCRA with facility personnel. ExxonMobil trains employees initially and then every year using webbased modules that are assigned to employees based on job title. The inspection team reviewed slides for the RCRA-specific training that operators take. Mr. Frank Radio, SSHE Systems Coordinator, also goes to a Lion Technology training course on an annual basis to receive additional RCRA-specific training and DOT training to qualify him to sign hazardous waste manifests.

#### 11) Records Review

The inspection team reviewed the following records:

- Manifests for January 2014 to June 2016;
- Weekly inspection logs for waste areas;
- Training records for DOT training to sign hazardous waste manifests and jobspecific training relevant to RCRA issues for Tom Femano, Jose Caamano, and Frank Radio;
- Discharge Prevention Containment and Countermeasures (DPCC) Plan; and
- Waste minimization plan.

These documents were found to be in order. The inspection team noted that the facility typically ships hazardous waste offsite every 180 days, and uses hazardous waste codes D001, D003, D021, F002, F003, and F005.

### 12) Inspection Conclusion

A closing conference was held on July 14, 2016, following the inspection. The inspection team identified two areas of concern related to ExxonMobil's RCRA compliance.

A 55-gallon drum in the laboratory sample cage contained hazardous waste rags, but did not have a label 1.

Each container should be labeled "Hazardous Waste" or with other words that identify the contents. Regulatory Citation: 40 CFR 262.34(c)(1)(ii).

Universal waste lamps in the universal waste area were not in properly labeled, closed containers<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> ExxonMobil staff labeled the container during the inspection after the inspection team identified the issue.

Universal waste lamps should be placed in containers that are dated; closed; and labeled "Universal Waste – Lamps," "Waste Lamps," or "Used Lamps." In addition, the date the first used lamp is placed in a container should be recorded to verify that the lamps do not remain in storage for more than one year. Regulatory Citations: 40 CFR 273.13(d)(1), 40 CFR 273.14(e) and 40 CFR 273.15(c).

13)	Signed:			
	Christopher Krejci Christopher Krejci Environmental Engineer RCRA Inspector (EPA Credential #10688)	August 5, 2016 Date		
14)	Concurrence:			
	Otis S. Kerns Environmental Engineer Enforcement Officer RCRA Compliance Branch Waste and Chemical Enforcement Division	Date		

<sup>&</sup>lt;sup>2</sup> ExxonMobil staff placed the universal waste lamps into properly labeled, closed containers during the inspection.